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BRIAN BRAKE, MAGNUM

EARNEST Moslem scholar interprets a passage from the Koran in idyllic Kashmir

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Kashmiri "landlords" rent them palatial houseboats that float on the tranquil lakes and waterways—a style of living originated by the British, who were forbidden to own land in the vale. Such pleasure barges can hold the equivalent of a six-room house, with bedrooms, salons, sun decks, running water, and electricity wired from shore. Often the kitchen is located on a smaller boat tied to the stern.

If they tire of one view of lake and mountain, visitors have their homes towed to another vantage point.

Peddlers paddle up in shikaras, the Kashmiri equivalent of Venice's gondolas. They offer goods ranging from tooth paste and orange squash to armfuls of flowers. Among their most treasured wares are the famous handicrafts of Kashmir. Weaving, embroidery, carpetmaking, silversmithing, carving, and leatherworking are common skills in the vale.

Kashmir is beautiful, and hard-working, but not rich. One Kashmiri declared, "There are three things that ease the heart from sorrow—water, green grass, and the beauty of women." He smiled sadly. "That is what the proverb says. We have all these in Kashmir; yet ours is a poor country."

Nevertheless, the land has been a bone of contention since Alexander the Great began his invasion of India in 326 B. C.

Currently, the dispute is between India and Pakistan. Kashmir and its 4,000,000 people have been split between the two neighbors for 10 years.

India claims Kashmir as part of its own land. Pakistan holds that no decision can be made until there is a popular vote to decide which country Kashmir should join.

A cease-fire line was established in 1949, thus avoiding a major war, but leaving the issue to fester.

Armies of the two nations face each other across the line. As in East and West Germany, the line divides families and friends. For a decade United Nations mediators have tried to arrange a vote, so far without success.

The artificial split is also felt in the economy of the country. It cuts off trade between the Vale of Kashmir and Pakistan.

One factor in the division is religious—the conflict between largely Hindu India and Moslem Pakistan. But within Kashmir, the sects live in peace.

"In some places," one Hindu said, "it may be different. But in Kashmir we are friends."

Although tolerance is esteemed, religion remains a strong force in Kashmiri life. The majority are Moslem (see cover), but Hindu, Sikh, and Buddhist minorities follow

PHOTOGRAPHS BY BRIAN BRAKE, MAGNUM

*Rich in Beauty, Poor in Worldly Goods*

# *Vale of Kashmir*

PADDLES BITE into the sapphire Jhelum River as Kashmiri boatmen race past a mosque.

Their sport is also their livelihood, for the jade-green Vale of Kashmir is the Venice of the East. Waterways outnumber roads in the capital, Srinagar (above), where the Jhelum serves as main thoroughfare and shopping center.

Nestled like a cup of emeralds among the highest mountains of the world, Kashmir long has been a coveted playground. Its beauty and cool air make it an oasis between the jumbled Himalayas and the parched plains of India. Mongol hordes found respite there centuries ago.

When the Great Emperor Jahangir, "Conqueror of the World," lay dying in the 16th century, his attendants asked: "Is there anything your majesty desires?"

With a plaintive sigh, he replied, "Only Kashmir."

Later, British governors of India flocked to Kashmir when they could get away from their posts in the hot, brown land to the south. Among idyllic views of blue water and greenery they lolled on houseboats, built clubs and golf courses. When Great Britain gave up control in 1949, the vacationers departed, leaving a gap in Kashmiri economy. Now shepherds graze their herds on the fairways of the Gulmarg golf course (below) while vacant hotels weather beside the forested slope.

Tourist trade is reviving. Some British still come, but most visitors are from America or India.

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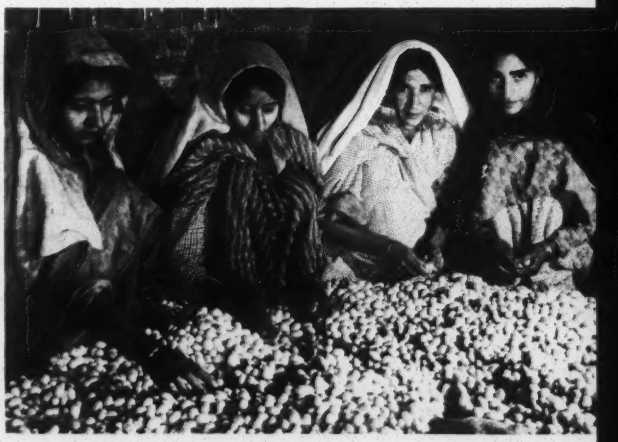
one product by the silk industry, the land's largest. Armies of silkworms busily munch leaves from plantations of mulberry trees to produce the fine fibers.

Women workers squat around piles of cocoons, some almost white, others golden yellow, facile hands sorting the delicate strands (below). Many a World War II airman owes his life to parachute silk produced here.

Today the production is devoted to handsome silken cloth to charm a maharaja's wife, an American woman of fashion, or a "high fashion" designer in Europe.

Decorating such cloth is a task for highly skilled fingers. Much is turned over to men for careful embroidery (below). Sometimes they labor for months over a single exquisite piece of goods. A constant companion is the water pipe, or hubble bubble, in the center.

Boys begin learning the trade quite young. Their skills are developed until they can produce identical designs on both sides of a single piece of cloth. —F.S.



A MOUND of silk cocoons offers raw material to the careful needleworkers of Kashmir. Each cocoon contains a mile and a half of fiber—the result of five weeks feeding of a silk worm.

PHOTOGRAPHS BY NATIONAL GEOGRAPHIC PHOTOGRAPHER VOLKMAR WENTZEL

**See Also:** The *National Geographic Magazine*, November 1958, "The Emperor's Private Garden: Kashmir," and April, 1948, "The Idyllic Vale of Kashmir" ($1 each). *National Geographic* Map, "Southwest Asia" (paper $1; fabric $2). All prices postpaid.

their own beliefs. At right, two bearded Hindu holy men, or *sadhus,* make a pilgrimage. They have renounced the world, and carry all their meager belongings—including a brass pot for begging alms. Their goal is the Amarnath Cave in the mountains east of the vale. The cave is the legendary abode of Siva, the Hindu Destroyer and Recreator.

Shia Moslem ceremonies in Srinagar include a yearly lamentation over the death of Husain, a grandson of the Prophet Mohammed. In religious ecstasy, some devotees slash themselves with groups of knives attached to chains, but feel no pain.

Lakes and canals give Kashmiris a bathtub, trash dump, and transportation (below). Fishing and even farming on the lakes add to the food supply.

Since flat land is scarce, many farmers use floating gardens—tangled masses of plants and soil which are built up on quiet canal banks, then

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cut free and floated to a lake. With their garden moored to stakes, the farmers work in boats.

Fertilizer, in the form of water weeds, is readily available beneath. Such a garden produces melons and vegetables for about 10 years. Then it decays and sinks, and the farmer must build anew.

Floating gardens have one disadvantage—they are easy to steal. A thief in a boat can tow away the garden, crop and all.

Water is also important to the recreation of Kashmir. The people now frolic in the famous gardens built by Mogul emperors for their own pleasure. They enjoy shady bowers, shimmering pools, fountains, and flower-decked waterfalls in a festive, restful atmosphere. Most famous in song and story is the Shalimar Garden, now a public park in Srinagar.

The beauty and hard work of Kashmir are combined in

tween its legs and sides. It can execute 90-degree turns or avoid an obstacle with a slight flick of the tail.

The uncanny ability of this flier to land on the exact spot it chooses fascinates naturalists. One qualified observer who kept two in his apartment to watch thinks they do it by geometry. "Before taking off on an unfamiliar leap," writes Ernest P. Walker, former Assistant Director of the National Zoological Park in Washington, D. C., "the squirrels lean far to one side, then far to the other, and finally rise as high as they can on their arms, closely examining the spot to which they propose to leap. Are they measuring the distance by triangulation?"

Mr. Walker suspects they are. Of one thing he is sure, however. That is that they make playful pets. In the *National Geographic Magazine* he reported that his pair soon became tame enough to act as photographer's models. He set up a camera, and rigged it with electronic flash and a cable release. Taking the release in one hand, he tapped his chest with the other. After a moment's calculation, a squirrel would accept the invitation and leap for his chest or face. At the right instant, he pushed

ERNEST P. WALKER

the button and caught this memorable photograph at 1/5000th of a second.

Two species of flying squirrels inhabit the United States. The smaller (*Glaucomys volans*) can be found in most of the eastern half of the country. A larger species (*Glaucomys sabrinus*) lives in timbered sections of the West, with one form ranging into northern New England and the States bordering the Great Lakes.

To see a flying squirrel in action, find a wooded glen that has a few dead trees still standing and where the acorn supply seems plentiful. When twilight comes, pull up a comfortable log, sit down, and wait. If you're in luck, you'll soon hear a scurrying of feet on the branches above you, then the high-pitched screech of the flying squirrels as they play aerial tag among the trees.

Then again you may find one closer to home. Many an attic rustle has turned out to be not bats in the belfry but a flying squirrel which got off course.—A.P.M.

**See Also:** *National Geographic Magazine*—May 1947, "Flying Squirrels, Nature's Gliders" by Ernest P. Walker ($1). Write for free lists of other National Geographic articles on Nature and Science.



UMI

# FLAPS DOWN! Flying Squirrel Spreads Furry 'Wings' for Landing

EDWIN L. WISHERD, NATIONAL GEOGRAPHIC STAFF

LIKE a veteran pilot, it scans the landing site. Then, with "wings" outstretched, whiskers aquiver, plumed tail pointing downward for balance, shoebutton eyes gleaming, it sets sail. At the last instant, up snaps the tail, down drop the hind legs, and this flying bundle of fur lights on a tree trunk. Quickly it scurries around the trunk, putting the protecting tree between itself and any hungry owl which might have followed.

This is the flying squirrel, a rodent that takes to the air. It is the airborne cousin to the red and gray squirrels—and just as common. Wildlife census takers estimate that from three to six of them inhabit each acre of good forest land across the northern part of the United States.

But this nimble Tarzan of the trees is rarely seen by humans because it ventures out only at night. Daylight hurts the sensitive eyes. So it nestles in a hollow tree until dusk settles. Its color blends with its dark environment. Most varieties are grayish buff or slate gray above, whitish below. Soft fur covers it loosely, like a coat several sizes too big for its five-inch body. Like its better-known cousins, the flying squirrel is primarily a vegetarian. It hoards berries, acorns, and nuts. An occasional insect provides a bit of variety.

ERNEST P. WALKER

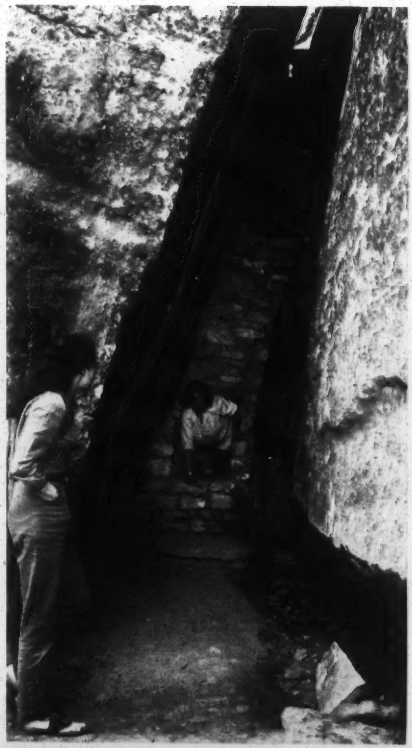
Fueled on this diet, it can leap into the air and glide the length of a city block if necessary to reach the next tree. With aerial artistry it can change speed and angle instantly while in flight by varying the slack in the membranes that stretch be-

for sight-seers. At the same time, scientific purposes will be served. Though we know much about pre-Columbian life in the United States, many questions remain. It is hoped this project will shed new light on the intelligent but shadowy race which built the cliff palaces.

Dr. Melville Bell Grosvenor, President and Editor of the National Geographic Society, and Conrad L. Wirth, Director of the National Park Service, already have visited the area and mapped out a five- to six-year program to unearth these new sites and preserve the resulting treasure of archeological knowledge and artifacts.

"The Society is proud to take a leading part in the important work at Wetherill Mesa," Dr. Grosvenor reported in the January *National Geographic Magazine*.

"Over the years the National Geographic Society has been privileged to play a part in the exploration and preservation of such national treasures as the Valley of Ten Thousand Smokes, Carlsbad Caverns, Pueblo Bonito, the giant sequoias, and Russell Cave. The Wetherill Mesa project will carry on that tradition." —R.G.



PHOTOGRAPHS BY WILLARD R. CULVER

UMI

# NEW LIGHT ON CLIFF DWELLERS

## National Geographic–National Park Service Project Restores Cluster of Mesa Verde Ruins

FRIGHTENED farmers once lived in Long House (below). Their women and children seldom ventured from the cliff-side cave enclosing stone and adobe homes. On tablelands above, men raised corn in scraggly fields, darting eyes ever searching the horizon for raiding nomads. Unstolen crops they stored in the darkest recesses of their fortresslike cliff dwelling. They pulled up ladders behind them or sealed off narrow entranceways (below, right) and hoped their enemies would spare them.

So lived the prehistoric Pueblo Indians in what is now Mesa Verde National Park, Colorado. For 1300 years they held off their hungry foes. Then another enemy, drouth, did what nomads alone never succeeded in doing—driving the cliff dwellers out of their homes.

Two hundred years before Columbus the sad exodus to water was nearly completed. The silence of centuries enveloped Mesa Verde until 1888 when two cowboys beheld the ghostly splendor of Cliff Palace, hung like a giant swallows' nest in a canyon-wall cave (bottom picture).

In 1906 the National Park Service took over the area and opened Cliff Palace and other near-by ruins to public view. Last year 200,000 visitors filed through the narrow passages. So great is American interest in Southwest archeology that pedestrian traffic jams have sometimes prohibited full enjoyment and appreciation by visitors.

MELVILLE BELL GROSVENOR

Fortunately, there are hundreds of known archeological sites in Mesa Verde National Park. One cluster of large ruins below the rim of outlying Wetherill Mesa contains Long House, Mug House, and Step House. These never have been scientifically explored or opened to the public.

Now the National Park Service and the National Geographic Society have launched a major archeological project which will excavate and stabilize these ruins and create an entirely new center

thought Russia would cooperate in treating Germany as a unit.

Instead, the Reds set up their own state—East Germany.

The Western powers remained in control of their three sectors of Berlin, with guaranteed access by rail, road, canal, and air.

Only three years later the U.S.S.R. tried to squeeze them out by cutting off all land and canal transportation.

There remained only the air. The Western Allies accepted the challenge and fed the city for almost a year by means of a flock of huge cargo planes. The unprecedented airlift flew in 8,000 tons of food and fuel a day—reaching the fantastic total of 12,940 tons on Easter Sunday, 1949. Outmaneuvered, the Bear released its hold.

Except for minor incidents, ground and air traffic have moved unimpeded ever since.

Similar determination marks the free Germans and the United States in facing current Russian growls.

President Eisenhower has warned that America will not "enter into any arrangement or embark on any course of conduct" that might jeopardize the people of West Berlin.

If it should come to blockade, the city is better prepared than 10 years ago. Stockpiled and waiting is $150,000,000 worth of food and coal—a six-month supply.

Also waiting are the people of West Berlin. "We'll stay here and we'll keep this city a bearable place to live," one worker declared. "They won't get any further with us now than they did the last time."

**SUBWAY TO FREEDOM—The East German refugee seeking help from a West Berlin policeman at left has just emerged from the subway entrance below. East Berlin is in the background.**

PHOTOGRAPHS BY NATIONAL GEOGRAPHIC PHOTOGRAPHER VOLKMAR WENTZEL

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RUSSIA CONTROLS nearly half the city. Derisive Berliners dub the eastern sector "West Moscow."

BLACK LINES SCAR the map of Berlin, splitting the city into pieces like a pie. The Soviet Union, unfilled by the half a pie it already has devoured, plots to gobble up the rest.

The Russian plan calls for Berlin to be declared a "Free City" and cleared of Soviet, British, French, and American troops. Then East Germany, the U.S.S.R. satellite which surrounds the city, would be able to dictate to it.

The Western sector of Berlin exists as a free island in the Red sea. One hundred and four road miles separate it from democratic West Germany. A beacon of freedom in the center of an oppressed land, it is a constant pain in the Communist neck. To the East Germans it stands as a tower of hope. More than a million of them have stolen across the line into Free Berlin to escape the clutch of Communism.

Here the two systems stand side by side for inspection. The Communists come out losers. Rapid reconstruction and well-filled shop windows in the west half contrast with rubble and broken buildings in the east.

The people look different, too. Not only are West Berliners better dressed, but their faces reflect more smiles and less fear.

This fragmented human geography stems from World War II, when the Allies agreed that "Greater Berlin should be occupied by troops of the four powers." In the heady atmosphere of 1945, Western leaders

## COMMUNISM DARKENS EAST BERLIN LIFE

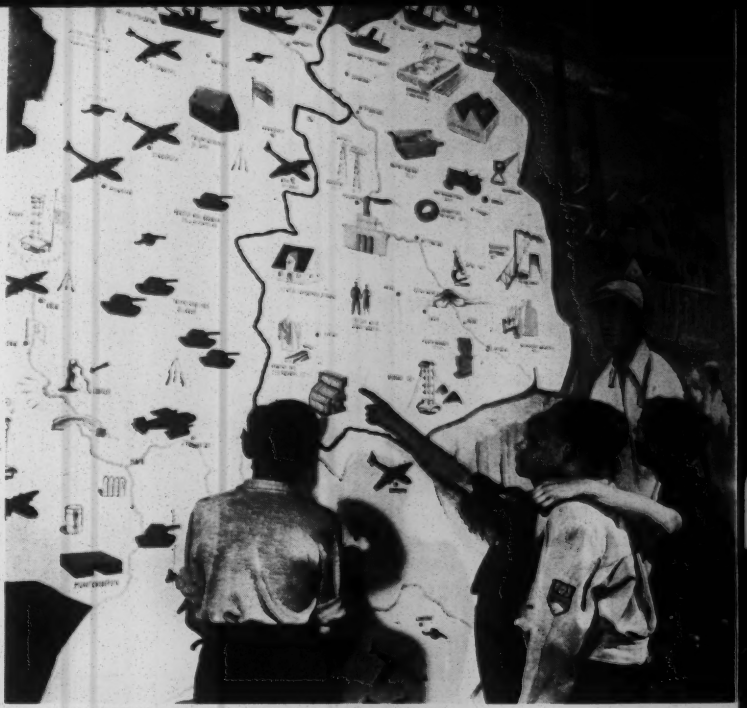
ACROSS THE LINE in the grime of East Berlin weary men and women plod past bomb-shattered buildings. Jagged wall stumps rise between a few rebuilt houses like decayed teeth between good ones.

At Alexander Platz, once a smart shopping center, now stand state-owned stores. Poker-faced women, wearing drab dresses, search quietly through limp piles of clothing. There are no bargains.

Like West Berlin the Communists have "showcases" of their own. Stalin Allée shows off Moscow-style apartment houses along a mile of boulevard. Shops, theaters, and restaurants occupy the ground floors.

At "Das Haus der Soviet Kultur" children view exhibits designed to grind propaganda into their heads under the guise of peace. The display at right shows divided Germany. Tanks, planes, and battleships symbolize the "warlike" intentions of the West while peaceful pursuits (home construction, medicine) supposedly occupy the East Germans.

Another showcase is Unter den Linden, tree-lined prewar center of German politics and social life. Now this broad thoroughfare is likely to be the scene of a Soviet-sponsored Youth Festival. Marching, singing, horn-blowing boys and girls of the FDJ, a Communist youth movement, echo the Communist call (left).



PHOTOGRAPHS BY NATIONAL GEOGRAPHIC PHOTOGRAPHER VOLKMAR WENTZEL

As Frederick Vosburgh, Associate Editor of the *National Geographic Magazine*, wrote: "They could have been Hitler Youth in 1939. Nothing had changed but the color of the shirts."